

OWNER'S MANUAL FOR THE G-11 (GMRS)



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OPTIONAL ACCESSORIES FOR YOUR RADIO

Accessory Name	Model Number
Standard wall Charger	18-396
Charger Stand	18-383
Dual Charger Stand	18-385
Lapel Microphone with Ear-bud Speaker	22-405
Speaker/Microphone	22-411
Boom Microphone Headset	22-540

Call 1 816 241 8500 ext. 200 to order accessories or order them online at www.midlandradio.com

This Midland model G-11 radio operates on GMRS frequencies which require a license from the Federal Communications Commission (FCC) for business, personal, and recreational use. A GMRS license held by an individual may be shared by immediate family members.

At the date of this publication the application for your FCC license is made on FCC form 605 (with optional Schedule F). To obtain forms, call the FCC forms hotline at: **1-800-418-3676** or go to **http://www.fcc.gov**.

For questions concerning licensing, contact the FCC at **1-888-CALL-FCC** (1-888-225-5322), or go to **http://www.fcc.gov**.

THIS RADIO COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE CONDITION THAT THIS DEVICE DOES NOT CAUSE HARMFUL INTERFERENCE.

Your Midland model G11 UHF FM GMRS two-way radio is designed to provide you with line-of-sight communications for a range up to 4 miles. The model G11 incorporates channels with 38 different CTCSS and 83 DCS codes to provide the best in quiet communications. Also this radio offers scan, power save, 9 memory channels and a multifunction back-lighted liquid crystal display. This unit also incorporates VOX (voice operated transmit) that allows hands free use when the radio is equipped with certain accessories.

WARNING

Your wireless hand-held portable transceiver contains a low power transmitter. When the Pushto-Talk (PTT) button is pressed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

To maintain compliance with the FCC's RF exposure guidelines, this transmitter and its antenna must maintain a separation distance of least 2 inches (5 centimeters) from your face. Speak in a normal voice, with the antenna pointed up and away from the face at the required separation distance. The belt clip is for storage purposes only. <u>DO NOT TRANSMIT WHILE USING THE BELT CLIP.</u> To transmit, hold the device away from your body and ensure the antenna is at least 2 inches (5 centimeters) from your body when transmitting.

TIPS FOR GETTING THE MOST FROM YOUR G-11

Due to the band of operation (462 MHz) the G11 provides communications that are virtually free of atmospheric interference (skip) that is common on lower frequency bands. Along with this and an antenna system that is very efficient, communications range is surprisingly good. Many times the limit to maximum possible range is environmental factors such as blockage caused by trees, buildings, hills, or other obstructions. If you find communication is not possible, many times this can be overcome by moving only a few feet to a new location. Range is greatly reduced while operating from a metal building or from a vehicle. Battery condition also affects range. The G11 operates on rechargeable Ni-MH batteries or alkaline batteries. While this unit has been designed with gaskets for water resistance and ruggedness it is a precision piece of electronic equipment that should not be exposed to water or handled carelessly. Normal care should result in years of trouble free operation. Do not leave batteries installed over a long period of time as leakage may occur, that can destroy the radio. If you experience problems operating the radio, turn off the radio, press and hold the "F" button and turn on the radio. This will cause the radio to return to the factory settings. Always save your receipt, as it is required for warranty consideration.

A note About CTCSS/DCS Codes

This radio incorporates 38 CTCSS (Continuos Tone Coded Squelch System) codes and 83 DCS (Digital Coded Squelch) codes that, when activated, prevent the user from hearing other radios that do not have the same code. These codes **do not** make <u>your</u> conversation private. If you experience difficulties contacting or hearing other radios in your group make sure the CTCSS or DCS code is set the same on all radios. If you are using the G11 where interference from other radios or electrical devices are present, enabling the CTCSS or DCS codes will usually mute the interference. Many times interference will be noticed by the presence of loud static from the speaker.

PREPARATION

BATTERIES:

G11 radios operate with 4 AAA Alkaline, or Ni-MH (nickel metal hydride) batteries (optional) or at reduced transmitter power with 3 AA Alkaline, Ni-Cad (Nickel Cadmium) or Ni-MH (nickel metal hydride) batteries (optional). Alkaline AA batteries will provide about 45 hours of use, Ni-Cad batteries will provide about 15 hours of use and Ni-MH batteries will provide about 24 hours of use. Alkaline AAA batteries will provide about 15 hours of use and Ni-MH batteries will provide about 10 hours of use. The G11 may be supplied with a wall charger. Ni-MH and Ni-Cad batteries must be charged prior to use. Charge at least 10 hours with the standard charger. DO NOT attempt to charge any type of Alkaline batteries in this radio.

Installing Batteries:

Hold the radio face down. Press the latch so it swings away from the cover.

- 1. Lift the battery cover slightly. Gently slide the cover off the unit.
- Insert 4 AAA batteries observing the proper polarity.
 Alternate option: remove AAA battery adapter insert. Insert 3 AA batteries observing the proper polarity.
- 3. Replace the battery cover over the batteries and fasten with the latch.

Battery Indicator:

The battery Condition indicator in the display will show the amount of charge of your batteries. Replace alkaline or recharge the Ni-MH batteries as soon as possible after the indicator shows 2 segments or less of the battery lit.

CHARGING THE BATTERIES

The 18-383 charger and Ni-MH AAA batteries are usually supplied with the radio. This charger is designed to recharge Ni-MH AAA batteries and AA Ni-Cad batteries only. Install the batteries observing their polarity. If you are using rechargeable batteries and the Midland standard charger (model 18-396), plug the charger into a 115 volt wall socket and the charger plug into the charge jack under the cover marked "CHG" (item 11on Page 8 illustration) on the **bottom** of the radio or into the drop-in charger. Allow the batteries to charge 10 hours for Ni-MH AAA or Ni-Cad AA prior to use. When using a drop-in charger follow the setup instructions then simply set the radio in the charger stand and observe that the LED on the charger is lit. The radio should be turned off while charging. Never attempt to charge any type of Alkaline battery in this radio

BELT CLIP

The G11 comes standard with a belt clip. Attach it to the radio back by sliding the top of the clip up over the two rectangular bosses on the back of the radio until it snaps into place. To detach the belt clip, press the lever inside the top of the clip away from the radio body and slide the clip toward the bottom of the radio.

The belt clip is intended for storage of the radio only (waiting for a call). Do not transmit the radio while attached to your belt. (see warning on page 4)

QUICK USE INSTRUCTIONS:

- 1. Install fresh alkaline or fully charged Ni-Cad or Ni-MH batteries.
- 2. Turn the unit on by rotating the ON/OFF Volume control clockwise.
- 3. The squelch is factory set and is not adjustable.
- 4. Make sure the radio you want to talk to does not have the CTCSS or other codes turned on.
- 5. To talk, press and hold the **"PTT"** (Push to Talk) button on the side of the radio marked "PTT". Talk into the front of the radio about 6 inches from your mouth.
- 6. To listen release the "PTT" button.

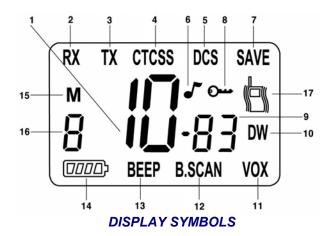
POWER SAVE CIRCUIT

This part of the operation of the radio is completely automatic and not adjustable. When the radio has not transmitted or received a signal for several seconds it will begin to cycle from a sleep mode to fully on. This occurs several times a minute. If a signal is received or you cause the radio to transmit, the radio will become fully on. This cycling from sleep to fully on increases the battery life more than 50%. An icon in the upper right of the display flashing "SAVE" will verify this.

RANGE OF UHF RADIOS

The best range between portable UHF radios is achieved when they are operating in open terrain outside of buildings and vehicles. Anyone using a portable unit inside a vehicle will experience a significant loss of range.

Operating the Radio



CAUTION: DON'T EXPOSE THE DISPLAY TO EXTREME HOT OR COLD TEMPERATURE

- 1. Channel number: Displays channel number 1-15.
- 2. RX Symbol Indicates busy channel.
- 3. TX Symbol Indicates unit transmitting
- 4. CTCSS Code Symbol: Indicates "CTCSS" tone is active
- **5. DCS Symbol:** Indicates that Digital Coded Squelch mode is on.
- 6. Musical note indicates ROGER BEEP is on
- 7. SAVE Symbol: Flashes indicating battery save is active
- 8. Key Symbol indicates when the keypad has been locked. Only the "PTT" and "CALL" buttons are active when this indicator is on
- **9.** Shows the "CTCSS" or "DCS" code you have selected. When this is on, other radios you talk to must be set to the same code
- 10. DW Symbol: Indicates Dual Watch channel selection is active
- 11. VOX Symbol: Indicates "VOX" is activated
- **12. B.SCAN** indicates the scan mode B is in use. **SCAN** indicates the normal scan mode is in use
- **13. BEEP** indicates the button press tone is active
- **14. Battery symbol** shows the battery condition. Replace or recharge the batteries when this indicator displays 2 or fewer segments of the battery
- 15. M Symbol: Indicates a memory channel is active
- **16. Number** indicates memory channel in use.(when programmed)
- 17. Vibrator Symbol: Indicates call vibrator is on.

FEATURES AND LOCATION OF CONTOLS





1-VOX button 2-Up/Down Buttons 3-Monitor Button 5-Call Button 6-Accessory jacks 7-On/Off Vol. Cont 9-Function Button 10-charging contacts 11-Charge Jack

3-Monitor Button 4-Push to Talk Button 7-On/Off Vol. Control 8-Enter Button

THE RADIO MUST <u>NOT BE SCANNING OR TRANSMITTING</u> AND THE CONTOLS <u>NOT LOCKED</u> BEFORE THE CONTROLS WILL WORK PROPERLY.

TURNING THE RADIO ON OR OFF

Rotate the ON/OFF Volume control (7) clockwise to turn the radio ON. An audible tone will indicate the radio is on. The display will go through a 1 second self test and go to operation mode. Rotate the ON/OFF Volume control counter clockwise to turn the radio off

LOCKING THE CONTROLS

Press and hold the "MON" button (3) for about 3 seconds a beep (if enabled) will be heard and the KEY icon will be displayed. The "PTT" and the "CALL" are the only buttons active. If any other buttons are pressed 3 quick beeps will be heard.

UNLOCKING THE CONTROLS

Press and hold the "MON" button (3) for about 3 seconds a beep (if enabled) will be heard and the KEY icon will **not** be displayed.

ADJUSTING THE VOLUME

Rotate the ON/OFF Volume control (7) clockwise to increase the volume. Rotate the ON/OFF Volume control counter clockwise to decrease the volume.

ADJUSTING THE SQUELCH

Squelch is preset, no adjustment is available.

USING THE CALL FUNCTION

Press and release the "CALL" button (5) on the side of the radio.

This will cause the radio to transmit a tone to alert the other people in your group to listen for a message.

Use of the call function is discouraged if using the 22-405 or the 22-540

USING THE MONITOR FUNCTION

- 1. Press and release the "MON" button (3) on the side of the radio to open the squelch.
 - This allows you to over ride the squelch and the "CTCSS" or "DCS" tones. This is useful to monitor the channel before you transmit to ensure there is not someone using the channel when you have "CTCSS" or "DCS" tones programmed. This is also useful if you suspect someone in your group does not have the proper "CTCSS" or "DCS" tones programmed.
- 2. Press and release the "MON" button or wait 10 seconds to restore the squelch to normal.

TURNING ON OR OFF THE BUTTON PRESS BEEP

- 1. With the radio turned off, press and hold the "ENTER" button (8) and turn the radio on. The radio will display all segments available on the display and sound the power up tone. Release the "ENTER" button when the radio powers up. The display will show "FF" or "oN" depending on the previous setting, and below in smaller letters "BEEP"
- 2. Press and release the "Λ" or "V" button to change the setting.
- 3. The setting "oN" is Beep on. The setting "FF" is Beep off.
- 4. Press and release the "ENTER" button to return to operating mode.

TURNING ON THE DISPLAY BACKLIGHT

Press and release the **"ENTER"** button (8). A beep will be heard (if enabled). The back-light will stay on for about 5 seconds then turn off.

TURNING THE ROGER BEEP ON OR OFF

Roger beep is a sound the radio transmits when you release the "PTT" button (4).

- 1. With the radio turned off, press and hold the "ENTER" button and turn the radio on. The radio will display all segments available on the display and sound the power up tone. Release the "ENTER" button when the radio powers up. The display will show "FF" or "oN" depending on the previous setting, and below in smaller letters "BEEP"
- 2. Press and release the "F" button once. An icon of a musical note will be displayed above "oN" or "FF" on the display.
- 3. Press and release the "Λ" or "V" button to change the setting.
 - The setting "oN" is Roger beep on. The setting "FF" is Roger beep off.
 - The Roger beep is the same sound as the Power Up tone
- 4. Press and release the "ENTER" button to return to operating mode.
- Use of roger beep is discouraged when earphones or headsets are in use.

TURNING THE CALL VIBRATOR ON OR OFF

The Call Vibrator feature causes a vibration in the unit when the incoming call signal is received. To use this feature follow these steps:

- 1. With the radio turned off press and hold the "ENTER" button and turn the radio on. The radio will display all segments available on the display and sound the power up tone. Release the "ENTER" button when the radio powers up. The display will show "FF" or "oN" depending on the previous setting.
- 2. Press and release the "F" button twice and the icon will be displayed (in most units) above "oN" or "FF" on the display.
- 3. Press and release the "\lambda" or "\varV" button to change the setting.
- The setting "oN" is call vibrator on, The setting "FF" is call vibrator off.
- 5. Press and release the "Enter" button to return to operating mode.

ACTIVATING SCAN FUNCTIONS

The G11 has three scan modes. The most popular and most used is the "**BUSY**" channel scan. This allows the radio to stop on a channel that someone is talking on.

When the radio stops on a "Busy" channel, the scan will stop and resume after about 5 seconds. The second is the "OPEN" channel scan. This allows the radio to stop on the channel NOT used. The third is "DUAL WATCH". This allows you to monitor the active channel and one of the fifteen available channels.

Busy Channel Scan:

- 1. Press and release the "F" button (9), the "SCAN" icon will begin flashing in the lower center of the display.
- 2. Press and release the "Λ" or "V" button to activate scan. The unit will now begin scanning the active channels.
 - Pressing the "PTT" (push to talk) button will cause the radio to stop scanning and return to normal operate mode.
 - When you enter the "program mode" with the "F" button the radio will go back to operate mode after about 8 seconds if no buttons are pressed.

Open Channel Scan:

- 1. Press and release the "F" button repeatedly (usually twice) until the "B.SCAN" icon flashes in the lower center of the display.
- 2. Press and release the "\nabla" or "\varV" button to activate scan. The radio will begin to scan for the **OPEN** channel.
 - Scanning will stop on the open channel for about 5 seconds then move to the other channel.
- 3. Press the "PTT" button to stop scanning and talk on that channel.
- 4. To reactivate scan repeat steps above.
 - When you enter the "program mode" with the "F" button the radio will go back to operate mode after about 8 seconds if no buttons are pressed.

Dual Watch

Dual watch is a function that allows you to scan the current active channel and one other channel.

- 1. Select the active channel.
- 2. Press the "F" button repeatedly (usually 5 times) until "DW" is flashing in the top of the display.
- 3. Select the second channel to be scanned.
 - About 3 seconds after your selection of the second channel is complete the radio will begin switching between the two channels.
 - When the radio hears activity on either channel, scanning will stop on that channel for about 5 seconds and then resume scanning.
 - If communication is desired on the channel scanning stopped on, press the "PTT" button. This will deactivate Dual Watch and allow you to communicate normally.
- 4. To reactivate Dual Watch repeat steps above.

ACTIVIATION "PRIVACY CODES"

To activate "CTCSS" codes

- 1. Press the "F" button repeatedly (usually 3 times) to cause the icon "CTCSS" to be displayed in the upper left of the display to flash.
- 2. Press and release the "Λ" or "V" buttons to select the "CTCSS" code you desire.
 - A code of "00" means no code is programmed.
 - You must do this for each of the channels you want CTCSS codes on.
 - Activating the "CTCSS" code will prevent you from hearing any conversation that is not using the <u>same</u> "CTCSS" code. This <u>does not</u> make your conversation private.

The following is a list of frequencies of the CTCSS codes. Different brands of radios may use a different number code for the frequencies. For operation with other brands of radios the selected CTCSS frequency must match.

```
01=67.0 Hz 11=97.4 Hz
                       21=136.5 Hz
                                    31=192.8 Hz
02=71.9 Hz 12=100.0 Hz
                       22=141.3 Hz
                                    32=203.5 Hz
03=74.4 Hz 13=103.5 Hz
                       23=146.2 Hz
                                    33=210.7 Hz
04=77.0 Hz 14=107.2 Hz 24=151.4 Hz 34=218.1 Hz
05=79.7 Hz 15=110.9 Hz 25=156.7 Hz 35=225.7 Hz
06=82.5 Hz 16=114.8 Hz 26=162.2 Hz
                                    36=233.6 Hz
07=85.4 Hz 17=118.8 Hz 27=167.9 Hz 37=241.8 Hz
08=88.5 Hz 18=123.0 Hz 28=173.8 Hz 38=250.3 Hz
09=91.5 Hz 19=127.3 Hz 29=179.9 Hz 00=OFF
10=94.8 Hz 20=131.8 Hz 30=186.2 Hz
```

DCS CODES - There are 83 "**DCS**" codes. These are used in the same manor as the "CTCSS" codes.

To activate the DCS Codes

- 1. Press the "F" button repeatedly until the "DCS" icon flashes (usually 4 times).
- **2.** Press the " Λ " or "V" button to select the "**DCS**" code you desire.
- 3. Press the "ENTER" button when you have made your selection.
 - When you enter the program mode with the "F" button, the radio will go back to operate mode after about 8 seconds if no buttons are pressed.
 - A code of "00" means no code is programmed.
 - You must do this for <u>all</u> the channels you want "**DCS**" codes on.
 - Turning on the "DCS" code will prevent you from hearing any conversation that is not using the <u>same</u> "DCS" code. This <u>does not</u> make your conversation private.

The following list contains the values of the "DCS" codes. Different brands of radios may use different codes. For operation with other brands of radios the selected "DCS" value <u>must</u> be the same.

```
01=023 11=071 21=134 31=223 41=306 51=411 61=503 71=631 81=734 02=025 12=072 22=143 32=226 42=331 52=412 62=506 72=632 82=743 03=026 13=073 23=152 33=243 43=315 53=413 63=516 73=654 83=754 04=031 14=074 24=155 34=244 44=331 54=423 64=532 74=662 05=032 15=114 25=156 35=245 45=343 55=431 65=546 75=664 06=043 16=115 26=162 36=251 46=346 56=432 66=565 76=703 07=047 17=116 27=165 37=261 47=351 57=445 67=606 77=712 08=051 18=125 28=172 38=263 48=364 58=464 68=612 78=723 09=054 19=131 29=174 39=265 49=365 59=465 69=624 79=731 10=065 20=132 30=205 40=272 50=371 60=466 70=627 80=732
```

RESETTING THE RADIO

If the radio stops responding to button presses or otherwise does not function properly in some cases the radio can be reset to restore normal operation.

To reset the radio: With the radio off, press and hold the "F" button and turn the radio on. Release the "F" button when the radio powers up. (see turning the radio on)

This operation will reset the radio to factory settings and will erase all memory channels that have been programmed.

OPERATING HANDS FREE VOX - VOICE OPERATED TRANSMIT

To get the most use from the "VOX" feature you must first determine what sensitivity level is needed to activate the "VOX" control. Sensitivity is how loud you have to talk to activate the "VOX" circuit. The "VOX" has 6 levels of sensitivity that can be adjusted. The 1 option you can talk in a normal voice with no background noise to activate the "VOX" circuit. The higher level numbers will require increasing voice level to activate the "VOX" circuit. This is useful in noisier areas that might activate the "VOX" without talking. The next adjustment is the *delay*. This is a function of the "VOX" that keeps the radio in transmit mode after you stop talking. A delay that is set to short will cause the "VOX" circuit to stop between some words. The delay is adjustable to 6 levels. Level 1, the shortest will give about one half second of delay. Increasing the delay value extends the transmitter time to two seconds or more. By activating the "VOX" you only have to talk into the front of the radio or use a headset to make the radio transmit. The PTT (push to talk) button is not functional in "VOX" mode. It is recommended to use a headset when using the "VOX" feature.

Setting "VOX" Sensitivity Level:

The sensitivity is adjustable by 6 levels. Level 1 is the most sensitive.

To set the sensitivity level

- 1. With the radio turned off, press and hold the "ENTER" button and turn the radio on. The radio will display all segments available on the display and sound the power up tone. Release the "ENTER" button after the radio powers up. The display will show "FF" or "on" depending on the previous setting, and below in smaller letters "BEEP"
- 2. Press the "F" button repeatedly (usually three times) until you see "LE" on the display.
 - The number next to "**LE**" is the sensitivity level setting.
- **3.** Press the " Λ " or "V" button repeatedly to change the "**VOX**" sensitivity.
- **4.** Proceed to step 2 below if setting the delay is desired.
- **5.** Press and release the **"ENTER"** button to return to the operation mode or press the **"F"** button to continue settings.

Setting "VOX" Delay.

The Delay is adjustable by 6 levels. Level 1 is the least amount of delay.

- 1. Refer to step one above.
- 2. Press and release the "F" button until "dL" is on the display.
 - The numbers next to the "**dL**" is the delay setting.
- 3. Press the "\n" or "\r" button to change the **DELAY** setting.
- 4. Press and release the "ENTER" button to return to operation mode.

Using accessories while in "VOX" mode.

Accessories for private listening are available. Those with a "VOX/PTT" switch built in can be used with the G11 in "VOX" mode. Turn on the radio. Set the radio to "VOX". Set the accessory VOX/PTT switch to" VOX".

Wey beep tones may sound very loud when using a headset or earpiece. We advise turning off tones and avoid using the call feature when using accessories.

SETTING REMOTE MONITOR MODE

- 1. Choose a channel to be used, set **BOTH** radios to that channel.
- 2. With the radio to be used for the monitor off, press and hold the "ENTER" button and turn the radio on.
- 3. Release the "**ENTER**" button when the radio powers up.
- 4. Press and release the "F" button repeatedly until "bb" (usually five times) is on the display.
- 5. Press and release the "\lambda" or "\lambda" button repeatedly to select the sensitivity level.
 - The two numbers to the right of the "**bb**" is the sensitivity. This can be set from 01 to 06. A sensitivity level of 01 is the most sensitive.
- 6. Adjust the volume as desired.
- 7. Press and release the "ENTER" button to activate remote monitor mode.
 - The radio will enter monitor mode after 1 minute. If the remote radio hears a sound, the radio will send the call signal. After the call is complete the remote radio will transmit for 10 seconds. This allows you to hear the sound. After the 10 seconds of transmit is complete, the remote radio will go to receive for 10 seconds allowing you to transmit to the remote radio. This cycle continues 3 times then the remote radio goes back to monitor mode.
 - To ensure reliable communications, be certain fresh batteries are used.
- **WARNING** This monitoring is NOT intended in any way as a life saving device.

To exit the remote monitor mode Switch the radio off then on.

SETTING MEMORY CHANNELS - There are 9 memory channels available.

To set Memory Channels

- 1. Press the "F" button repeatedly until the "M" is displayed above the flashing memory channel number in the lower left of the display (usually 7 times).
- 2. Select a memory channel by pressing and releasing the "Λ" or "V" buttons.
 - If the channel you want to program is the displayed channel when you access the memory program mode, you must change the channel and return to that channel before programming is allowed.
- 3. Press and release the "F" button. The first number (usually will be 0) will flash. Choose a channel by pressing and releasing the "Λ" or "V" button.
 - The next step has three options. 1. Choosing a "CTCSS" tone. 2. Choosing a "DCS" tone. 3. Choosing no tone at all.
- 4. Press and release the "F" button. The next two numbers (usually will be 00) will flash as well as the "CTCSS" in the upper left of the display. If no tone is desired go to step 5. Select a "CTCSS" tone desired or press and release the "F" button again. The "DCS" will begin to flash, select a "DCS" tone desired.
- 5. Press and release the "ENTER" button to complete the programming.
 - The "CTCSS or "DCS" must be flashing when you press the "ENTER" button to complete the programming.
 - After pressing the "ENTER" button, the radio will go back to normal operating mode.

ACCESSING MEMORY CHANNELS

- 1. Press and release the **"F"** button repeatedly (usually 6 times) until the display shows a number in the lower right of the display.
 - This will be the location **without** the "**M**" above the number.
 - lf the number is flashing this indicates the memory channel has not been programmed.
- 2. Press and release the "Λ" or "V" button to select a "Memory Channel" previously programmed.
 - To exit the "Memory Channel" mode, press and release the "ENTER" button or press the "F" button twice.

TROUBLESHOOTING

PROBLEM

SOLUTION

No Power	Check battery installation and/or replace alkaline batteries or recharge rechargeable batteries. <u>DO NOT</u> attempt to charge any type of Alkaline battery in this radio!
Cannot Receive Messages	 Make sure the volume is set high enough. Confirm the radios have the same channel and or CTCSS/DCS code settings. Change your location, you may be out of range. Install batteries properly or replace. Buildings, obstructions, operating indoors or in vehicles may interfere with communication. Change your location. Make sure the radio is not transmitting. This could be due to the radio being switched to VOX operation or accessories not set properly.
Range is short	 Operating the radio from a vehicle or from a metal building will decrease the range. If possible operate outside of vehicles or buildings. Carrying the radio so that the antenna is very near the body will decrease the range. Hold the radio in the open for the best range. Battery condition can affect range. Replace or recharge batteries.
Radio is not responding to button presses	 Make sure radio is not in "VOX" mode. Make sure key lock is not on. See To lock the controls Make sure radio is not transmitting. Radio might need to be reset, See Resetting Radio. Ensure accessory microphone is set properly (see Page 12).
Interference/Static	 Using the CTCSS should stop you from hearing interference from other users and computers. Radios too close. Radios must be at least 5 feet apart. Radios too far apart. Obstacles interfere with transmissions. Talk range is up to 5 miles in unobstructed, clear areas.
Charger not functioning	 Charger pin is not properly in place. Check that charger is fully inserted into the jack on the bottom of the radio. If using the drop-in charger, check the contacts on the bottom of the radio they may require cleaning. Ensure the outlet the charger is plugged into is functioning properly. Check that the batteries are installed in the radio properly. Remove batteries from the radio and try to charge separately.
Display is dim	Reposition or replace alkaline batteries or rechargeable batteries. <u>DO NOT</u> attempt to charge any type of Alkaline battery in this radio!

CARE OF RECHARGEABLE NI-CAD AND NI-MH BATTERIES

PLEASE ALWAYS DISPOSE OF BATTERIES PROPERLY

Always follow the battery manufacturers recommendations for charging and disposing of Ni-Cad and Ni-MH batteries.

General information regarding Ni-Cad/Ni-MH batteries;

- 1. Occasionally allow the batteries to fully discharge before recharging. Full discharge will be indicated by the low battery indicator coming on during receive operation.
- 2. Always allow the battery to fully charge before using. This requires 10 hours with the approved charger. (Ni-MH batteries require 16 hours for full charge.)
- 3. The above will prevent the batteries from developing "memory" which effectively reduces their capacity.
- 4. It is better to store Ni-Cad batteries that are discharged rather than charged. Ni-MH batteries are best stored charged.

TECHNICAL SPECIFICATIONS*

Frequency range	462.5625-462.725 MHz
Channels	15
Modulation type	FM
Antenna impedance	
Loud-speaker	

Alternate Power supply....... 3 AA Ni-Cad, Ni-MH or Alkaline(3.6/4.5VDC)

RECEIVER

GENERAL

Sensitivity at	12dB
Sinad	
Selectivity	50 dB

TRANSMITTER

RF Output Power	nominal 1000 mW @ 4.5VDC, 2 watts @ 6.0VDC
Frequency Tolerance	0.0005%
Harmonic Suppression	more than 50 dB
Modulation	FM +/- 4.0 kHz

^{*}Specifications are nominal and subject to change CHANNEL FREQUENCIES (MHz)

CHANNEL FREQUENCIES GMRS

01=462.5625	05=462.6625	09=462.625	13=462.650
02=462.5875	06=462.6875	10=462.675*	14=462.700
03=462.6125	07=462.7125	11=462.550	15=462.725
04=462.6375	08=462.575	12=462.600	

^{*}Specifications are nominal and subject to change

SERVICE

If you have a problem, which you believe requires service, please call first and speak with a service technician. Many problems can be remedied over the phone without returning the unit for service.

If it ever becomes necessary to return your unit for service:

- Pack the unit in its original box and packing. Improper packing may result in damage during shipment.
- Include a full description of any problems.
- Include a daytime telephone number.
- Include a money order for \$7.50 to cover shipping and handling (this may not be required in some states). You do not need to return accessory items (charger, batteries, wrist strap, owners guide) unless they maybe directly related to the problem.
- ♦ Include a photocopy of the bill of sale or other proof of purchase showing the date of sale. This information must be included before warranty service can be considered.
- A flat rate of \$35.00 will apply to repairs not covered by the 1 year warranty. These items include but not limited to Abuse, Internally modified circuits, damage caused by water, battery leakage or liquid spilled into the radio.
- Payment is accepted by Cashiers Check, Money Order, Master Card or Visa only. Personal checks will not be accepted.

Items not covered by the warranty include abuse, water damage, battery leak damage, broken antennas, broken battery latch

LIMITED WARRANTY

Midland Consumer Radio will repair or replace, at its option without charge, any Midland (GMRS) transceiver which fails due to a defect in material or workmanship within one year following the initial consumer purchase.

This warranty does not include any carrying cases, earphones, or telescoping antennas which may be a part of or included with the warranted product, or the cost of labor for removal or re-installation of the product in a vehicle or other mounting.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, along with proof of purchase date, to Midland Consumer Radio, Warranty Service Department 1120 Clay Street North Kansas City, MO 64116, or to any "Midland Authorized Warranty Service Station," or to the place of purchase (if a participating dealer).

Warranty information and the location of the nearest "Midland Authorized Warranty Service Station," may be obtained by writing Midland Consumer Radio, Warranty Service Department.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Note: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions or from U.S. military exchange. For warranty coverage on merchandise purchased elsewhere, consult the supplemental warranty information included with this product or ask your dealer.

MIDLAND RADIO CORPORATION

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Or visit us at www.midlandradio.com